

**A MESSAGE FROM THE DEPARTMENT OF
PUBLIC WORKS REGARDING DRINKING WATER**

A response to the Notice of Noncompliance issued by the Department of Environmental Protection (DEP) regarding the Town's drinking water supply was recently published in the *Bedford Minuteman* and mailed to all residents and businesses. The Department of Public Works maintains the water distribution system which requires sampling and testing to ensure water quality standards are met. During July and August various samples indicated the presence of coliform bacteria; follow up samples for those locations came back negative. It is important to understand that coliforms are bacteria that are naturally present in the environment and are monitored because their presence in the water is an indicator of potential issues within the distribution system. The summer months are usually the time when coliform appear since elevated water temperatures can facilitate bacteria growth. The coliform itself are generally not considered harmful and no harmful bacteria such as E.coli or fecal coliform were identified in the sample tests. Therefore the water coming from the Bedford distribution system is safe to drink.

Over the last three summers the Town has had numerous samples indicating coliform at various sites throughout the system, but namely the outer sections of Town where disinfection levels have been lower than normal. With assistance from DEP, the Massachusetts Water Resource Authority which provides 90 percent of our water and CDM Smith, the Town's consulting engineer, the DPW has worked diligently to alleviate the issue. In both 2012 and 2013, the MWRA had to provide the Town with their mobile disinfection unit; however we have not needed to use their supplemental disinfection system this year as the number of positive coliform samples has been significantly less.

There has been a significant amount of work improving the distribution system over the past three years including cleaning and lining of water mains, tank cleaning, flushing and computer system upgrades. This past summer the Town has contracted for cleaning and relining of water mains along Shawsheen Road and Page Road which serve as part of the primary route from the Town's connection to the Lexington water system. This process scrapes off deposits within the pipe that can harbor bacteria growth. Once the interior of the main is cleaned, a cement lining is sprayed in place which prohibits future growth of rust and tuberculation. Recent cleaning and lining of water mains has been completed on Concord Road, Fletcher Road, Fitchdale Avenue, School Ave, Maple Street, The Great Road, Brooksbie Road, Shawsheen Avenue, Gray Terrace, and Roberts Drive.

The Town has three elevated water tanks used for storage, fire protection and to maintain pressure throughout the system. All three tanks are routinely drained and cleaned. Both the Pine Hill and Crosby Drive tanks have mixing systems which reduce water stratification and water age by constantly moving the water to achieve a blended water quality. The computer controlling the water system has been reprogrammed to ensure that more water is moving in and out of the tanks on a daily basis to maintain fresh water both in the tanks and throughout the distribution system.

Hydrant flushing has been increased as directed by DEP to improve water quality in the system by bringing in fresh water from the Lexington connection. Flushing in 2014 has been less than previous years due to the lower incidents of coliform and the generally higher disinfectant levels in the farther parts of Town. The Water Division regularly flushes hydrants each spring and fall to remove any rust or other sediments in the system.

In early March the Town switched its source of water supply to the Town of Burlington system to take advantage of the process that Burlington uses for disinfection. Unfortunately this only lasted for a week, since Burlington had some operational issues that had to be worked out. Burlington uses “free chlorine” for disinfection, rather than a combination of chlorine and ammonia that MWRA uses in its treatment process. The elevated levels of chlorine from the Town of Burlington’s system significantly attack bacteria and any biofilm in Bedford’s water system. The Town anticipates repeating this process in the spring of 2015.

The Department has been working diligently to make improvements to the water distribution network and will continue to review areas of concern to ensure a system that provides clean, safe water. These efforts have shown much better results as testing has indicated minimal water problems as compared with past summers.

Thank you for your patience and support. Please feel free to call the Department of Public Works should you have any questions or concerns: (781) 275-7605.

Roy E. Sorenson
Director of Public Works